

Mineral Industry Surveys

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COPPER IN OCTOBER 2002

Average daily mine production in October declined by about 4% from the relatively high production in September. Average daily smelter production rose by about 6%, while average total refined copper production fell by 7%. While monthly consumption of refined copper was essentially unchanged in October from that of the previous month, consumption for the first 10 months of 2002 was down by almost 8% from the comparative period in 2001. Imports for consumption of refined copper for the first 9 months of 2002 of 693,000 metric tons (t) were down by 42,000 t compared with imports during the first 9 months of 2001. General imports, which include material entering the country under bond, of 812,000 t were down by 59,000 t for the same comparative periods.

Copper output continued at Kennecott Utah Copper Corp. operations despite threats of a strike following expiration of a 6-year labor agreement between Kennecott and its 1,200 union employees. The two sides had been negotiating unsuccessfully since mid-July. The company had reportedly offered wage increases and maintenance of existing benefits in exchange for "efficiencies and flexibilities" in labor practices (Platts Metals Week, 2002). While workers remained on the job, negotiations broke down in October and the two parties agreed to meet with a Federal mediator on November 7. Meanwhile, the United Steelworkers of America (USWA) and Kennecott had filed countering suits with the National Labor Relations Board (NLRB). The USWA alleged that, among other things, Kennecott had failed to give the union sufficient information, had failed to discuss the mandatory subjects of bargaining, and had unilaterally implemented its final contract offer. Kennecott alleged that the union had not been bargaining in good faith. The NLRB subsequently dismissed both sets of charges and the two

parties agreed to resume face-to-face mediation on December 9. Negotiations through the mediator, however, continued (Pisculli, 2002).

On October 25, ASARCO Incorporated announced that it was exploring the possibility of closing operations at its Mission Mine in Arizona by yearend owing to the unit's high operating costs and the persistence of low copper prices. Based on the current reduced operating rate, the closure would result in the loss of approximately 50,000 metric tons per year of copper in concentrates (ASARCO Incorporated, 2002a). Asarco subsequently announced that it had signed an agreement with a consortium of lenders, led by JP Morgan Chase, to extend repayment until January 31, 2003, of a revolving credit line of \$450 million, originally scheduled to mature on November 10 (ASARCO Incorporated, 2002b). Asarco continued to negotiate with the U.S. Department of Justice regarding the sale of its 54.2% stake in Southern Peru Copper Corp. The sale had been intended to raise capital for repayment of the credit line. (See Copper in July 2002 and Copper in August 2002.)

References Cited

- ASARCO Incorporated, 2002a, Asarco announces possible closing of Mission Unit in Arizona: Phoenix, AZ, ASARCO Incorporated press release, October 25, 1 p.
- ASARCO Incorporated, 2002b, Asarco signs agreement with bank consortium—Credit maturity date extended to January 31: Phoenix, AZ, ASARCO Incorporated press release, November 15, 1 p.
- Pisculli, Alysson, 2002, Kennecott sets second round with mediator: American Metal Market, v. 110, no. 96-2, November 26, p. 1, 3.
- Platts Metals Week, 2002, Kennecott plans to keep producing if strike hits: Platts Metals Week, v. 73, no. 39, September 30, p. 5, 6.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	Source table 2/	2001 p/	2002		
			September	October	January - October
Production:					
Primary:					
Mine, recoverable	(2)	1,340,000	96,700	95,900	947,000
Refinery:					
Electrolytic:					
Domestic	(4)	808,000	66,100	62,400	659,000
Foreign	(4)	192,000	W	W	40,000 3/
Electrowon	(4)	628,000	48,300	47,600	497,000
Total	(4)	1,630,000	114,000	110,000	1,200,000
Secondary recoverable copper:					
Refineries	(5)	172,000	7,120	6,280	73,100
Ingot makers 4/	(5)	121,000	10,100	10,100	101,000
Brass and wire-rod mills	(5)	727,000	69,200	59,500	663,000
Foundries, etc. 4/	(5)	67,100	5,590	5,590	55,900
Smelter, total	(3)	919,000	54,400	59,800	569,000
Consumption:					
Apparent	(8)	2,510,000	206,000	NA	NA
Refined (reported)	(7)	2,630,000	209,000	209,000	2,070,000
Purchased copper-base scrap	(9)	1,370,000	115,000	103,000	1,120,000
Stocks at end of period:					
Total refined	(11)	957,000	1,030,000	1,010,000	XX
Blister, etc.	(11)	98,000	77,600 r/	77,400	XX
Prices:					
U.S. producer cathode (cents per pound) 5/	(12)	76.854	71.863	72.319	75.639
Imports: 6/					
Ores and concentrates 7/	(14)	47,000	20,400	NA	NA
Refined	(14)	991,000	69,900	NA	NA
Exports: 6/					
Ores and concentrates 7/	(15)	45,300	1,870	NA	NA
Refined	(15)	22,500	1,320	NA	NA

p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; included in "Domestic." XX Not applicable.

1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ January - April only; excludes withheld data.

4/ Monthly data and 2001 cumulative data estimated based on 2000 monthly average.

5/ Source: Platts Metals Week.

6/ Source: U.S. Census Bureau.

7/ Copper content.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1/

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others 2/	Total	Electrowon	Concentrates 3/	Total
2001: p/						
January - October	736,000 r/	392,000 r/	1,130,000	520,000	623,000	1,140,000
October	76,800	36,600	113,000	55,000	60,000	115,000
November	73,000	29,000	102,000	54,100	49,300	103,000
December	75,900	35,800	112,000	54,200	59,100	113,000
Year	885,000	457,000	1,340,000	628,000	732,000	1,360,000
2002:						
January	65,400 r/	28,600	94,100	52,700 r/	42,500	95,300
February	59,200 r/	31,000	90,300 r/	45,700 r/	45,900	91,500 r/
March	66,100 r/	35,200	101,000	51,400 r/	51,200	103,000 r/
April	61,100 r/	32,800	93,900 r/	49,600 r/	45,500	95,100 r/
May	66,900 r/	29,900	96,800 r/	50,700 r/	47,500	98,200 r/
June	62,800 r/	29,800	92,600 r/	50,400 r/	43,400	93,800 r/
July	63,000 r/	29,600	92,600 r/	50,300 r/	43,500	93,800 r/
August	64,400 r/	28,300	92,800 r/	50,100 r/	44,000	94,100 r/
September	62,200	34,500	96,700	48,300	49,700	98,100
October	61,100	34,700	95,900	47,600	49,700	97,200
January - October	632,000	315,000	947,000	497,000	463,000	960,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

3/ Includes copper content of precipitates and other metal concentrates.

TABLE 3
COPPER PRODUCED AT SMELTERS IN
THE UNITED STATES, BY SOURCE 1/ 2/

(Metric tons, copper content)

Period	Anode production
2001: p/	
January - October	764,000 r/
October	80,500
November	75,600
December	79,600
Year	919,000
2002:	
January	64,300
February	50,300
March	61,900
April	60,400
May	62,200
June	55,400
July	50,400
August	50,300
September	54,400
October	59,800
January - October	569,000

p/ Preliminary. r/ Revised.

1/ Includes blister, anode and black copper from primary or secondary sources.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap	Total refined
	Electrolytic 2/		Electrowon	Total		
	Domestic 3/	Foreign				
2001: p/						
January - October r/	660,000	159,000	520,000	1,340,000	159,000	1,500,000
October	60,500	21,300	55,000	137,000	11,800	149,000
November	72,300	18,500	54,100	145,000	7,220	152,000
December	74,700	14,800	54,100	144,000	5,980	150,000
Year	808,000	192,000	628,000	1,630,000	172,000	1,800,000
2002:						
January	66,100	10,600	52,700 r/	129,000	6,920	136,000
February	57,900	8,410	45,700 r/	112,000 r/	7,630	120,000
March	55,900	10,700	51,400 r/	118,000 r/	7,090	125,000 r/
April	62,300	10,300	49,600 r/	122,000 r/	7,630	130,000 r/
May	76,100	W	50,700 r/	127,000 r/	8,180	135,000 r/
June	70,000	W	50,400 r/	120,000 r/	7,760	128,000 r/
July	74,100	W	50,300 r/	124,000	6,970	131,000
August	67,900	W	50,100 r/	118,000 r/	7,590	126,000 r/
September	66,100	W	48,300	114,000	7,130	122,000
October	62,400	W	47,600	110,000	6,280	116,000
January - October	659,000	40,000 4/	497,000	1,200,000	73,200	1,270,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Domestic."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

4/ January - April only; excludes withheld data.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 3/		Total 4/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2001: p/									
January - October r/	31,700	127,000	24,900	75,600	591,000	16,200	12,300	43,600	923,000
October	3,720	8,090	2,490	7,560	62,500	1,790	1,230	4,360	91,800
November	2,230	4,990	2,490	7,560	57,800	1,640	1,230	4,360	82,300
December	1,840	4,140	2,490	7,560	58,500	1,880	1,230	4,360	82,000
Year	35,800	137,000	29,900	90,700	707,000	19,800	14,700	52,400	1,090,000
2002:									
January	3,110	3,810	2,490	7,560	60,500	1,790	1,230	4,360	84,800
February	3,350	4,270	2,490	7,560	62,600	1,820	1,230	4,360	87,700
March	2,910	4,180	2,490	7,560	65,400	1,770	1,230	4,360	89,900
April	3,300	4,320	2,490	7,560	64,000	904	1,230	4,360	88,100
May	3,710	4,470	2,490	7,560	64,700	1,840	1,230	4,360	90,400
June	3,430	4,330	2,490	7,560	70,000	1,780	1,230	4,360	95,200
July	2,800	4,170	2,490	7,560	65,500	1,720	1,230	4,360	89,800
August	3,400	4,180	2,490	7,560	68,700	1,570	1,230	4,360	93,500
September	3,070	4,050	2,490	7,560	68,000	1,190	1,230	4,360	92,000
October	2,240	4,040	2,490	7,560	58,400	1,080	1,230	4,360	81,400
January - October	31,300	41,800	24,900	75,600	648,000	15,500	12,300	43,600	893,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Monthly data and 2001 cumulative data estimated based on 2000 annual data.

4/ Does not include an estimate, based on reported 2000 data, of 3,790 tons per month from new scrap and 2,380 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2001: p/						
January - October	1,240,000 r/	1,590,000	1,240,000 r/	1,590,000	XX	XX
October	124,000	165,000	123,000	166,000	52,000	24,800
November	116,000	158,000	117,000	155,000	52,300	27,900
December	113,000	134,000	111,000	134,000	54,200	27,900
Year	1,470,000	1,890,000	1,470,000	1,880,000	XX	XX
2002:						
January	123,000	146,000	125,000	143,000	49,500	30,300
February	122,000	139,000	123,000	134,000	48,500	35,600
March	131,000	148,000	130,000	145,000	48,900	38,800
April	130,000	155,000	130,000	157,000	48,800	36,400
May	131,000	155,000	132,000	158,000	48,200	33,000
June	134,000	139,000	133,000	143,000	51,900	28,500
July	123,000	144,000	123,000	147,000	51,400	25,400
August	132,000	148,000	132,000	152,000	51,900	21,500
September	127,000	145,000	125,000	147,000	54,600	19,500
October	130,000	154,000	127,000	151,000	57,300	25,200
January - October	1,280,000	1,470,000	1,280,000	1,480,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire-rod mills	Brass mills	Other plants 2/	Total
2001: p/				
January - October r/	1,660,000	535,000	52,200	2,240,000
October	166,000	46,600	5,220	218,000
November	153,000	45,700	5,220	204,000
December	132,000	41,800	5,220	179,000
Year	1,940,000	623,000	62,600	2,630,000
2002:				
January	143,000	46,600	5,220	195,000
February	140,000	47,500	5,220	193,000
March	149,000	51,400	5,220	206,000
April	157,000	51,400	5,220	214,000
May	157,000	58,600	5,220	220,000
June	143,000	54,500	5,220	202,000
July	150,000	49,600	5,220	204,000
August	157,000	54,300	5,220	216,000
September	152,000	51,000	5,220	209,000
October:				
Cathodes	151,000	39,100	1,210	192,000
Wire bars	--	--	(3/)	(3/)
Ingots and ingot bars	--	1,520	1,760	3,280
Cakes and slabs	--	(3/)	(3/)	(3/)
Billets and other	W	11,400	2,250	13,700
Total	151,000	52,000	5,220	209,000
January - October	1,500,000	517,000	52,200	2,070,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Cathodes." -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2000 annual data.

3/ Withheld to avoid disclosing company proprietary data; included with "Billets and other."

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Refined general imports 3/	Refined exports 3/	Stock change during period	Apparent consumption
2001: p/						
January - September	1,210,000 r/	265,000 r/	871,000	15,300	464,000 r/	1,860,000 r/
September	133,000	27,100	114,000	1,190	95,600	177,000
October	137,000	24,400	78,600	4,630	32,800	202,000
November	145,000	21,200	148,000	5,290	63,800	245,000
December	144,000	20,600	101,000	571	56,600	208,000
Year	1,630,000	331,000	1,200,000	25,800	617,000	2,510,000
2002:						
January	129,000	20,100	134,000	393	53,600	229,000 r/
February	112,000 r/	20,600	113,000	699	32,200	213,000
March	118,000 r/	20,500	64,300	3,150	19,900	180,000 r/
April	122,000 r/	19,800	105,000	652	16,200	231,000
May	127,000 r/	20,900	70,200	814	(16,000)	233,000 r/
June	120,000 r/	20,700	79,500	6,770	(33,000)	247,000 r/
July	124,000	20,400	83,500	7,690	13,500	207,000
August	118,000 r/	20,300	98,200	2,550	(5,530)	240,000 r/
September	114,000	19,800	64,000	1,320	(9,540)	206,000
October	110,000	19,700	NA	NA	(21,400)	NA
January - September	1,090,000	183,000	812,000	24,000	71,300	1,990,000

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2000 data.

3/ Source: U.S. Census Bureau.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. 2/		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2001: p/									
January - October	53,000 r/	130,000 r/	36,700 r/	104,000 r/	751,000 r/	16,800	21,800 r/	47,400 r/	1,160,000 r/
October	4,320	4,460	3,670	10,400	79,200	1,840	2,180	4,740	111,000
November	4,360	2,760	3,670	10,400	73,100	1,660	2,180	4,740	103,000
December	3,900	1,950	3,670	10,400	73,900	1,930	2,180	4,740	103,000
Year	61,300	135,000	44,000	125,000	898,000	20,400	26,200	56,800	1,370,000
2002:									
January	2,390	3,650	3,670	10,400	76,600	1,840	2,180	4,740	105,000
February	3,410	4,120	3,670	10,400	79,100	1,880	2,180	4,740	110,000
March	2,940	4,030	3,670	10,400	82,700	1,830	2,180	4,740	112,000
April	3,340	4,160	3,670	10,400	80,600	951	2,180	4,740	110,000
May	3,750	4,250	3,670	10,400	81,500	1,900	2,180	4,740	112,000
June	3,470	4,170	3,670	10,400	88,300	1,840	2,180	4,740	119,000
July	2,840	4,020	3,670	10,400	82,900	1,770	2,180	4,740	113,000
August	3,450	4,020	3,670	10,400	86,300	1,630	2,180	4,740	116,000
September	3,000 r/	3,890	3,670	10,400	86,100	1,250	2,180	4,740	115,000
October	2,610	3,950	3,670	10,400	73,900	1,130	2,180	4,740	103,000
January - October	31,200	40,300	36,700	104,000	818,000	16,000	21,800	47,400	1,120,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Monthly data and 2001 cumulative data estimated from 2000 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	2001 p/		2002			
	January - October	Year	August	September	October	January - October
No. 1 wire and heavy:						
Smelters and refiners	64,000 r/	73,200	5,610	5,240	5,670	55,600
Brass and wire-rod mills	330,000 r/	395,000	38,800	36,700	31,000	359,000
No. 2 mixed heavy and light:						
Smelters and refiners	93,100 r/	103,000	4,950	4,630	3,990	46,800
Brass and wire-rod mills	4,700	5,340	319	453	516	3,250
Total unalloyed scrap:						
Smelters and refiners	157,000 r/	176,000	10,600	9,870	9,660	102,000
Brass and wire-rod mills	334,000 r/	400,000	39,100	37,200	31,500	362,000
Red brass: 3/						
All plants	48,700 r/	57,400	4,930	4,650	4,510	45,700
Leaded yellow brass:						
All plants	298,000 r/	353,000	29,300	30,500	30,600	303,000
Yellow and low brass:						
All plants	91,100 r/	109,000	10,600	10,600	3,700	92,300
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	28,900 r/	35,500	6,140	6,630	7,290	52,800
Auto radiators:						
Smelters and refiners	38,700 r/	45,700	3,490	3,490	3,490	34,900
Bronzes:						
Smelters and refiners	9,120 r/	10,900	912	912	912	9,120
Brass mills	6,410 r/	8,300	930	935	935	9,410
Nickel-copper alloys:						
All plants	15,800 r/	18,600	1,420	1,400	947	13,600
Low grade and residues:						
Smelters and refiners	47,800 r/	50,000	1,110	1,110	1,110	11,100
Other alloy scrap: 4/						
Smelters and refiners 5/	8,620 r/	8,890	138	138	138	1,380
Brass mills	4,470 r/	5,570	565	565	565	5,580
Total alloyed scrap:						
Smelters and refiners	164,000 r/	185,000	10,700	10,700	10,700	107,000
Brass mills	434,000 r/	518,000	48,800	50,200	43,400	472,000
Total scrap:						
Smelters and refiners	321,000 r/	361,000	21,300	20,600	20,400	209,000
Brass and wire-rod mills	768,000 r/	919,000	87,900	87,300	75,000	834,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners."

1/ Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 6,920 tons of scrap per month in 2000; monthly data include estimates of about 15,500 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zinc bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

4/ Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

5/ Includes items indicated by symbol W.

TABLE 11
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper					LME 6/	Total refined
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/		
2001: p/								
October	105,000	19,300	34,700	20,100	4,680	191,000	566,000	837,000
November	88,500	24,300	30,900	24,700	4,680	215,000	601,000	900,000
December	98,000	28,600	37,600	25,500	4,680	244,000	617,000	957,000
2002:								
January	99,200	26,500	42,100	25,000	4,680	258,000	654,000	1,010,000
February	89,200	28,700	26,100	25,100	4,680	275,000	683,000	1,040,000
March	96,000	22,100	24,200	23,700	4,680	284,000	704,000	1,060,000
April	91,000	17,400	31,900	22,300	4,680	296,000	707,000	1,080,000
May	92,800	15,600	26,800	21,000	4,680	304,000	691,000	1,060,000
June	89,600	16,500	20,700	19,700	4,680	322,000	646,000	1,030,000
July	102,000	15,500	25,500	24,100	4,680	338,000	636,000	1,040,000
August	82,500	12,500	24,600	26,800	4,680	341,000	628,000	1,040,000
September	77,600 r/	11,600	23,200	24,000	4,680	344,000	621,000	1,030,000
October	77,400	10,600	18,400	19,800	4,680	346,000	607,000	1,010,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for nonrespondents.

4/ Monthly estimates based on reported and 2000 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode 1/	Comex first position 2/	LME cash price Grade A
2001:			
October	67.422	63.204	62.460
November	70.560	66.093	64.747
December	72.050	67.832	66.740
Year	76.854	72.567	71.574
2002:			
January	73.944	69.786	68.202
February	76.384	72.226	70.831
March	78.683	74.525	72.779
April	76.966	73.107	72.118
May	77.378	73.220	72.362
June	80.386	76.228	74.715
July	76.487	72.329	72.082
August	71.981	67.823	67.097
September	71.863	67.705	67.057
October	72.319	68.161	67.286
January - October	75.639	71.511	70.453

1/ Listed as "U.S. producer cathode."

2/ Listed as "Comex high grade first position."

Sources: Platts Metals Week and American Metal Market.

TABLE 13
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2001:				
October	61.39	52.78	44.48	38.39
November	63.45	53.82	40.09	37.09
December	65.87	54.47	41.47	37.00
Year	69.62	58.96	48.76	40.63
2002:				
January	67.36	55.62	41.19	38.10
February	69.42	57.29	43.00	37.00
March	72.24	59.76	43.00	39.00
April	71.82	54.00	44.00	38.91
May	71.98	60.39	44.00	37.00
June	74.65	71.28	44.00	39.00
July	72.41	61.04	44.00	39.00
August	66.84	55.64	42.45	37.64
September	66.80	55.68	40.80	36.00
October	66.83	56.70	39.09	36.00
January - October	70.04	58.74	42.55	37.77

Source: American Metal Market.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2002			2002			2002			2002		
	2001	September	January - September 2/	2001	September	January - September 2/	2001	September	January - September 2/	2001	September	January - September 2/
Brazil	--	--	--	--	--	--	--	--	--	12,000	3,000	33,400
Canada	7,210	--	8,350	43	--	75	79,700	6,760	63,500	270,000	13,600	185,000
Chile	19,600	20,400	58,100	--	--	--	87,700	3,240	26,200	174,000	24,400	187,000
Indonesia	6,010	--	2,910	--	--	--	--	--	--	--	--	--
Italy	--	--	--	--	--	--	12,200	--	--	--	--	--
Kazakhstan	--	--	--	--	--	--	--	--	--	82,400	--	2,060
Mexico	2,550	--	--	317	20	180	48,900	1,810	9,620	131,000	2,950	42,300
Namibia	--	--	--	--	--	--	6,840	1,790	4,640	--	--	--
Peru	11,600	--	5,950	--	--	--	22,600	--	4,730	280,000	22,700	207,000
Philippines	--	--	--	--	--	--	4,990	--	--	999	--	--
Russia	--	--	--	--	--	--	115	--	--	22,800	1,450	17,700
Spain	--	--	--	--	--	--	4,420	--	--	--	--	--
Taiwan	--	--	17	560	72	430	--	--	--	34	--	--
Turkey	--	--	2,910	--	--	--	--	--	--	--	--	--
Other	--	--	2	25	(3/)	4	3,510	--	3	17,400	1,790	17,600
Total	47,000	20,400	78,200	945	92	690	271,000	13,600	109,000	991,000	69,900	693,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes revisions to previous months' data.

3/ Less than 1/2 unit.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 15
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2002			2002			2002			2002		
	2001	September	January - September	2001	September	January - September	2001	September	January - September	2001	September	January - September
Belgium	18	2	42	--	--	(2/)	1,550	--	179	30	--	--
Canada	30,300	1,680	13,400	6,860	27	2,000	13,800	1,080	14,200	6,520	125	2,550
China	2,310	2	837	3	--	63	87	164	412	8,520	--	13,800
Egypt	--	--	--	--	--	--	2	--	--	2,160	--	2,200
France	1	--	--	64	--	2	2,130	40	80	62	--	42
Germany	443	--	28	50	--	74	982	--	159	169	3	50
Hong Kong	87	3	14	2	3	160	2,470	119	1,960	2,330	7	38
India	8	--	--	261	--	152	125	7	58	--	17	550
Israel	836	--	--	18	--	--	65	13	44	6	(2/)	14
Italy	20	--	--	--	--	--	376	19	150	27	--	--
Japan	19	--	36	8	3	1,300	216	--	40	460	16	39
Korea, Republic of	699	--	197	1,090	10	35	1,320	37	470	78	34	445
Mexico	9,130	46	2,420	15,300	984	6,990	22	--	29	821	5	121
Peru	--	113	974	--	--	39	--	--	--	--	--	--
Singapore	159	--	60	(2/)	(2/)	(2/)	407	60	383	14	2	7
Taiwan	347	21	25	50	13	84	1,130	138	872	146	58	1,610
Thailand	22	--	5	--	--	--	264	21	187	--	--	--
United Kingdom	280	--	8	49	--	65	451	39	344	457	1	527
Venezuela	501	--	--	--	--	--	5	--	8	140	--	205
Other	143	9	84	144	--	48	644	327	1,480	576	1,050	1,820
Total	45,300	1,870	18,100	23,900	1,040	11,000	26,000	2,060	21,100	22,500	1,320	24,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	2002		January - September	2002		January - September	2002		January - September	2002		January - September
	2001	September		2001	September		2001	September		2001	September	
Belgium	--	--	--	388	--	--	1,260	130	1,440	1,470	624	4,500
Canada	10,600	943	11,700	45,800	2,790	28,600	38,700	2,420	15,500	33,100	1,050	16,400
China	41	--	--	15	127	510	156,000	8,780	86,900	136,000	13,000	107,000
Colombia	--	--	--	899	46	565	--	--	--	18	--	2
Costa Rica	868	72	785	635	36	343	--	--	--	3	--	2
Dominican Republic	1,550	99	1,080	1,570	57	709	--	--	--	--	--	--
France	--	--	--	188		84	11	209	1,210	59	308	1,530
Germany	27	--	3	62	343	531	6,500	670	12,000	9,480	963	12,800
Guatemala	499	40	447	1,990	102	919	--	--	--	--	--	(2/)
Honduras	484	35	298	656	49	235	--	--	--	--	--	--
Hong Kong	--	--	3	--	--	--	4,300	191	7,080	5,440	417	4,620
India	--	--	--	--	--	--	2,770	349	3,240	33,400	2,510	33,200
Indonesia	--	--	--	20	--	60	66	16	488	58	126	358
Italy	309	--	116	--	--	--	117	--	30	143	--	19
Jamaica	283	52	310	470	20	221	--			--	--	--
Japan	169	7	58	--	47	71	13,800	894	8,980	13,200	748	6,540
Korea, Republic of	--	--	19	20	--	40	24,400	698	11,000	17,800	1,290	14,200
Mexico	13,500	713	7,160	24,000	1,400	13,200	2,760	156	1,880	4,370	36	169
Netherlands	--	--	--	20	--	354	109	232	232	963	189	636
Nicaragua	276	7	260	54	24	116	--	--	--	--	--	--
Panama	161	6	165	804	36	661	--	--	--	--	--	79
Peru	347	--	--	112	--	--	--	--	--	--	--	--
Spain	--	--	--	47	--	(2/)	549	19	109	2,710	59	1,750
Switzerland	--	--	--	45	--	--	596	46	104	3,720	135	1,280
Taiwan	--	--	15	554	58	335	9,120	781	7,890	5,870	1,080	7,070
United Kingdom	64	--	100	919	175	1,360	36	--	--	570	81	970
Venezuela	42	--	54	874	119	1,600	--	--	--	--	--	--
Other	992	31	704	4,230	221	1,650	802	14	1,180	3,440	305	2,080
Total	30,300	2,010	23,300	84,400	5,650	52,200	262,000	15,600	159,000	272,000	22,900	215,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.